

WHAT IS CLAIMED IS:

1                    1.        A method for manufacturing an armrest bun, the method  
2 comprising:  
3                    configuring a pour tool to include a cavity and a fixture, the fixture  
4 configured to receive a support substrate;  
5                    positioning the support substrate in the fixture such that a portion of  
6 the support substrate is in communication with the cavity; and  
7                    pouring a foam material into the cavity, the foam material sufficient  
8 to bond to the portion of the support substrate in communication with the cavity.

1                    2.        The method of claim 1 further comprising defining the cavity  
2 to include a curvature, the curvature matching a curvature in an armrest cavity, the  
3 poured foam shaped by the cavity curvature so that the foam forms to match the  
4 armrest cavity curvature.

1                    3.        The method of claim 1 further comprising defining the cavity  
2 to include a taper, the taper matching a taper in an armrest cavity, the poured foam  
3 shaped by the cavity taper so that the foam forms to match the armrest cavity taper.

1                    4.        The method of claim 1 wherein the support substrate includes  
2 an elongated prong, and wherein the method further comprise positioning the  
3 support substrate so that the elongated prong extends into the cavity, the poured  
4 foam chemically bonding to the elongated prong.

1                    5.        The method of claim 4 wherein the elongated prong includes  
2 an aperture, and the method further comprises positioning the support substrate so  
3 that the aperture is positioned within the cavity, at least a portion of the poured foam  
4 pouring through the aperture and chemically bonding thereto.

1                    6.        The method of claim 1 wherein the support substrate includes  
2 a funnel, the funnel extending from one side of the substrate through to an opposite  
3 side of the support substrate, and wherein the method further comprising positioning

4 the support substrate so that the poured foam pours through the funnel to reach the  
5 cavity.

1 7. An armrest, the armrest comprising:  
2 a first substrate defining a configuration of the armrest and including  
3 a first cavity;  
4 a skin covering the first substrate; and  
5 an armrest bun inserted into the first cavity, the armrest bun including  
6 a second substrate and a foam layer, the foam layer comprising a poured foam  
7 material bonded to the second substrate.

1 8. The armrest of claim 7 wherein a portion of the first cavity  
2 has a curvature, and wherein the poured foam material has a corresponding  
3 curvature such that the inserted armrest bun snugly fits to the curvature of the first  
4 cavity to limit dead-spots.

1 9. The armrest of claim 7 wherein a portion of the first cavity  
2 has a taper, and wherein the poured foam material has a corresponding taper such  
3 that the inserted armrest bun snugly fits to the taper of the first cavity to limit  
4 dead-spots.

1 10. The armrest of claim 7 wherein the first substrate includes a  
2 shoulder on an opening side of the first cavity, and wherein the second substrate  
3 includes a channel such that the channel of the second substrate mates with the  
4 shoulder of the first substrate to position thereto.

1 11. The armrest of claim 7 wherein the skin is flexible and  
2 includes a lip extending over an opening side of the first cavity, and wherein the  
3 second substrate includes a ridge such that the lip flexes over the second substrate  
4 to catch on the ridge of the inserted armrest bun to position the skin thereto.

1 12. The armrest of claim 7 wherein the first substrate includes an  
2 aperture proximate an opening side of the first cavity, and wherein the second

3 substrate includes a detent, the detent of the inserted armrest bun catching in the  
4 aperture of the first substrate to position the second substrate thereto.

1 13. The armrest of claim 7 wherein the first substrate includes an  
2 angled flange, the flange corresponding with an opening in a door panel such that  
3 an angle of the flange tightens the first substrate against the door panel when  
4 attached thereto to limit separation of the skin from the door panel.

1 14. The armrest of claim 7 wherein the skin is flexible and  
2 includes a lip extending over an opening side of the first cavity, and wherein the  
3 second substrate includes a locating face proximate the opening side of the first  
4 cavity when the bun is inserted into the first cavity, the lip resting on the locating  
5 face of the inserted bun if the skin is properly assembled, the lip separated from the  
6 locating face if the skin is improperly assembled.

1 15. The armrest of claim 7 wherein the second substrate includes  
2 an elongated prong extending laterally from an end of the second substrate into the  
3 first cavity, and wherein the poured foam is chemically bond to the prong.

1 16. The armrest of claim 15 wherein the foam is chemically  
2 bonded to top and bottom sides of the prong.

1 17. The armrest of claim 15 wherein the foam is chemically  
2 bonded to only a top side of the prong.

1 18. An armrest bun, the bun comprising:  
2 a support substrate configured for insertion into an armrest cavity;  
3 and  
4 a poured foam adhered to the support substrate.

1 19. The armrest bun of claim 18 wherein the foam includes a  
2 curvature and a taper to closely match a curvature and a taper of the armrest cavity  
3 to limit dead-spots.

1                            20.    The armrest bun of claim 18 wherein the support substrate  
2 includes an aperture through which foam can be poured for adhering to the support  
3 substrate.